

Title (en)  
APPARATUS AND METHOD FOR IRRADIATING AIR IN AN AIR CIRCULATION SYSTEM OF A VEHICLE

Title (de)  
GERÄT UND VERFAHREN ZUR LUFTBESTRAHLUNG IN EINEM UMLUFTSYSTEM EINES FAHRZEUGS

Title (fr)  
APPAREIL ET PROCÉDÉ DE RAYONNEMENT D'AIR DANS UN SYSTÈME DE CIRCULATION D'AIR D'UN VÉHICULE

Publication  
**EP 3925883 B1 20231018 (EN)**

Application  
**EP 21171098 A 20210429**

Priority  
• US 202063041709 P 20200619  
• US 202117192366 A 20210304

Abstract (en)  
[origin: EP3925883A1] An apparatus (100) for irradiating air flow in a vehicle includes a filter unit configured to couple to a recirculating-air conduit connected to a manifold of an air circulation system, the filter unit having an inlet end (112), and a filter (120) disposed in the inlet end of the filter unit, including an outer wall of filter media having a shape that defines an interior volume of the filter (120). The apparatus further includes an ultraviolet light (140) disposed on an end plate (130), configured to be mounted with the ultraviolet light positioned in the interior volume of the filter and the end plate against an open end of the filter (120). The ultraviolet light is configured to emit ultraviolet radiation substantially at between 222 nm and 265 nm for irradiating air flow through the filter into the air circulation system.

IPC 8 full level  
**B64D 13/00** (2006.01); **A61L 9/20** (2006.01); **B60H 3/06** (2006.01); **B64D 13/06** (2006.01); **F24F 8/10** (2021.01); **F24F 8/22** (2021.01)

CPC (source: CN EP US)  
**A61L 9/014** (2013.01 - CN US); **A61L 9/20** (2013.01 - CN EP US); **B01D 39/2055** (2013.01 - US); **B01D 46/0004** (2013.01 - US); **B01D 46/0005** (2013.01 - US); **B01D 46/0028** (2013.01 - CN US); **B01D 46/0036** (2013.01 - CN); **B01D 46/2411** (2013.01 - CN); **B01D 46/2414** (2013.01 - US); **B01D 46/4245** (2013.01 - US); **B01D 46/442** (2013.01 - US); **B01D 46/444** (2013.01 - US); **B01D 46/521** (2013.01 - CN US); **B60H 3/0078** (2013.01 - EP); **B64D 13/00** (2013.01 - EP); **B64D 13/06** (2013.01 - CN EP US); **F24F 8/10** (2021.01 - EP); **F24F 8/22** (2021.01 - EP); **A61L 2209/12** (2013.01 - US); **A61L 2209/14** (2013.01 - EP US); **A61L 2209/15** (2013.01 - US); **A61L 2209/16** (2013.01 - EP US); **A61L 2209/22** (2013.01 - US); **B01D 2265/04** (2013.01 - US); **B01D 2279/40** (2013.01 - US); **B01D 2279/65** (2013.01 - US); **B64D 2013/0603** (2013.01 - CN); **B64D 2013/0651** (2013.01 - CN US); **B64D 2013/0688** (2013.01 - EP US)

Cited by  
US2022057099A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3925883 A1 20211222**; **EP 3925883 B1 20231018**; CN 113813702 A 20211221; JP 2022008189 A 20220113; US 11904267 B2 20240220; US 2021394103 A1 20211223

DOCDB simple family (application)  
**EP 21171098 A 20210429**; CN 202110661977 A 20210615; JP 2021101374 A 20210618; US 202117192366 A 20210304